

Laser Measuring Device LE-200 CAN DeviceNet

Eglshalde 6
 D-78647 Trossingen
 Tel. +49 - (0) 74 25 / 228 - 0
 Fax +49 - (0) 74 25 / 228 - 33
<http://www.tr-electronic.de>
 Germany



- **Robust**
- **Measurement of Linear Movement**
- **Non Contact Distance Measurement**
- **Measuring Distance Up To 125m, 170m, 195m**
- **Interface: CAN DeviceNet**
- **Parameterizable via CAN-Bus**

Electrical Data

Measurement Principle	Phase shift measurement
Range (LE200 to Reflector)	0.2 – 125 m standard, 170m, 195m (special devices)
Resolution	selectable, physical resolution 0.7 mm
Linearisation	
up to 12m (standard).....	absolute linearity error ±3 mm
complete measuring length.....	absolute linearity error ±5 mm
Supply Voltage	18-27 V DC ± 5 %, 24 V DC ± 5 % (device with heating)
Power Dissipation (No Load)	< 6 Watt, < 60 Watt (device with heating)
Light Source	Laser Diode (Red Light) / Laser Protection Class 2 acc. to DIN EN 60 825-1: 2001-11
Wave Length λ.....	670 nm
Maximum Laser Power	P ≤ 1 mW
Lifetime (25°C / 77° F).....	50 000 h
Measurement Value Output / Cycle Time	1000 values per second
Integration Time	1 ms
Reproduction.....	± 2 mm
Programmable via RS485.....	PC IBM compatible TRWinProg software / CAN DeviceNet
CAN DeviceNet Interface.....	CAN-Fieldbus-Interface (opto-isolated) CAN-BUS-Driver (ISO/DIS 11898)
Baud rate (adjustable).....	- 125 kbps, line length up to 500 m - 250 kbps, line length up to 250 m - 500 kbps, line length up to 100 m
Output code.....	Binary
Special features	Configuration of the following parameters via the CAN-Bus: - Direction of Counting, - Clear Preset, - Scaling, - Preset, - Preset-Adjustment, - Resolution, - Function ext. input, - Automatic error acknowledgement, - Function error output, - Output value in case of an error, - Output of the error status via the bus
Switching input / Switching output	
Levels switching input	1-level > +8V, 0-level < +2V, up to ±35V, 5 kOhm
Levels switching output	-level > US-2V, 0-level < 1 V, up to 100mA

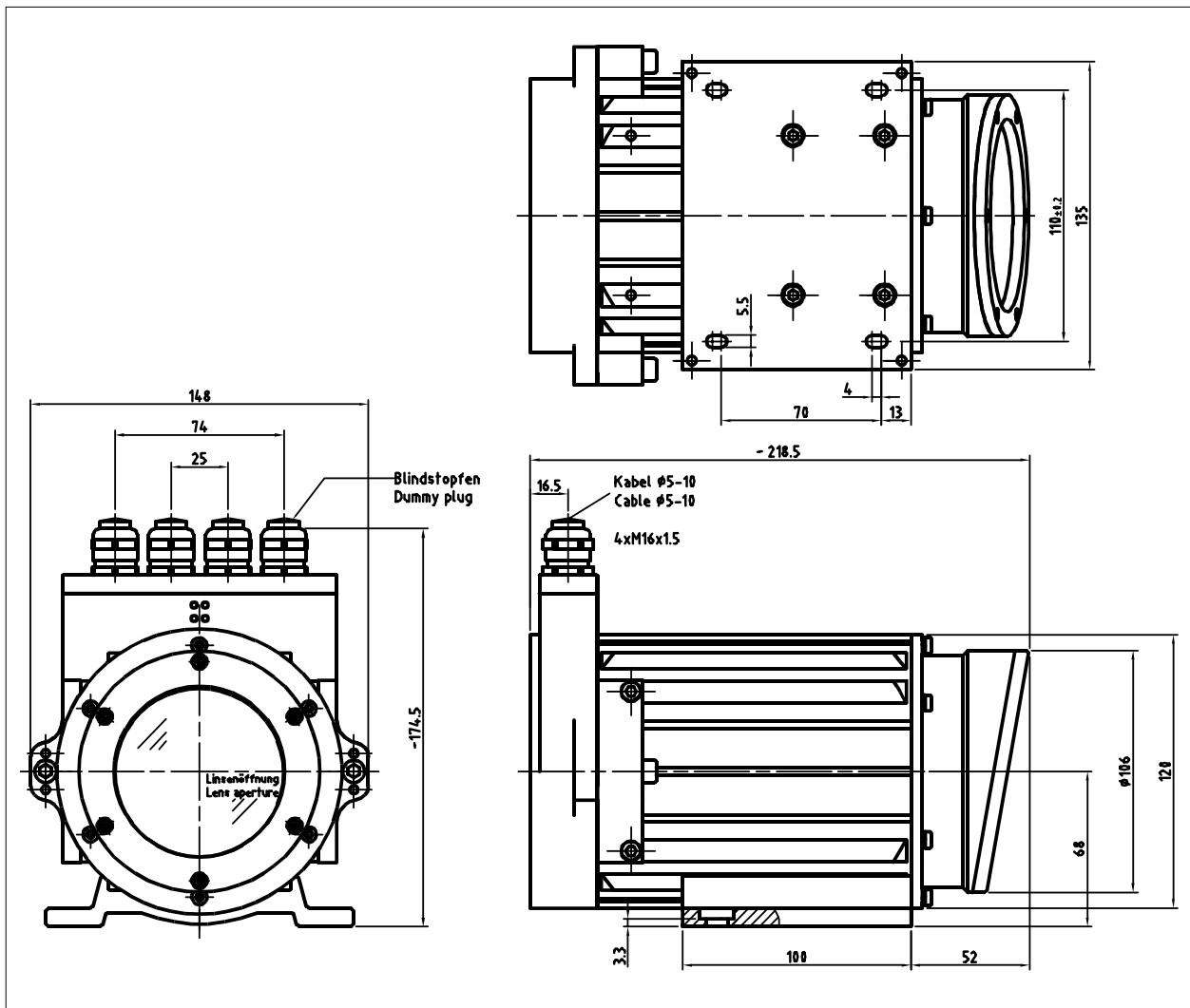
Environmental Data

Electromagnetic compatibility	EN 61000-4-2 (IEC-801-2) / EN 61000-4-4 (IEC-801-4)
Operating Temperature.....	0° to 50°C (32° F to 122° F), -30° to +50°C (device with heating)
Thermal drift.....	1 ppm / °C, related to the max. measuring length of 125 m, 170 m or 195 m
Storage temperature range	-20° to 75°C (- 4° F to 167° F)
Relative Humidity	98 % (non condensing)
* Protection Class	IP 65 (DIN 40 050)
* The protection class is valid for the device with screwed-together cable glands.	

Mechanical Data

Vibration (50-2000 Hz Sinusoidal DIN IEC 68-2-6 $\leq 50 \text{ m/s}^2$ (5g)
 Shock (11ms) DIN IEC 68-2-27 $\leq 300 \text{ m/s}^2$ (30g)
 Mechanical Special Types Upon Request
 Connection Screw Terminals, Cable Screw Gland 4 x M16 x 1.5

Dimension drawing (For the North American stock item version please go to the next page)



(For the North American stock item version please go to the next page)

Product Data Sheet

Art.: 2200-00402 LE-200 CAN DEVICE NET Linearised

Measurement Range	125m
Interface	CAN DEVICE NET
Output Level	RS485
Code	Programmable
Resolution	1.0 mm
Supply Voltage	18-27V
Ambient Temperature	0-50°C
Protection Class	IP65
Laser Class	2
Connector	4 x M16 x 1.5
Connector Orientation	Radial
Pin Out	TR-ELE-TI-GB-0009
Reflector	Yes
Options	Linearised Measurement Programmable
Version No:	
Software No:	
Drawing No:	04-K2200-002
Documentation No:	Document

see following page for dimensions

